

1. (Amended) A hydroconversion catalyst for hydrodesulfurizing feedstock while preserving octane number of said feedstock, comprising:

a support comprising a mixture of zeolite and alumina, wherein said support comprises between about 10 and about 90% wt of said zeolite and between about 90 and about 10% wt of said alumina, said zeolite is MFI zeolite having an Si/Al ratio of between about 1 and about 20;

B1 a metal active phase on said support and comprising a first metal selected from group 6 of the periodic table of elements, a second metal selected from the group consisting of group 8, group 9 and group 10 of the period table of elements, and a third element selected from group 15 of the periodic table of elements, wherein said metal active phase contains at least about 1% (wt) of said first metal, at least about 0.5% (wt) of said second metal, and at least about 0.2 % (wt) of said third element.

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